I claim:

1. A total shoulder arthroplasty apparatus for recreating an anatomic proximal humeral configuration, comprising:

a stemless humeral head for coupling to a cut humeral surface, wherein the humeral head includes a base having a stabilizing base extension protruding therefrom for impaction into a cancellous region of the cut humeral surface.

2. The apparatus of Claim 1, wherein the protruding base extension includes one or more fins for rotational stabilization.

3. The apparatus of Claim 2, wherein the one or more fins are substantially planar.

4. The apparatus of Claim 1, wherein the protruding base extension includes at least two fins formed to have a cruciform shape.

5. The apparatus of any of Claims 1, wherein the shape of the one or more fins is plano-triangular.

6. The apparatus of Claim 1, wherein the protruding base extension further includes at least one linear fin.

7. The apparatus of Claim 1, wherein the cancellous region said base extension protrudes into is non-intramedullary.

8. A total shoulder arthroplasty apparatus for recreating an anatomic proximal humeral configuration, comprising:

a stemless humeral head for coupling to a previously cut humeral surface, wherein the humeral head includes a base having a non stem-bearing stabilizing base extension protruding therefrom for impaction into a cancellous region of the cut humeral surface.

9. The apparatus of Claim 8, wherein the protruding base extension includes two or more linear extensions for rotational stabilization.

10. The apparatus of any of Claims 1 or 8, wherein the periphery of the humeral head is formed to match cortical margins of the cut humeral surface.

11. The apparatus of any of Claims 1 or 8, wherein the humeral head is attached to the humeral surface using an adhesive.

12. The apparatus of Claim 11, wherein the adhesive is surgical cement.

13. The apparatus of any of Claims 1 or 8, wherein the humeral head is attached to the humeral surface by press-fitting.

14. The apparatus of any of Claims 1 or 8, wherein the periphery of the base of the humeral head is formed to match a specific shape and size of the anatomic neck of a specific humeral surface.

15. The apparatus of any of Claims 1 or 8, further comprising a template punch inserted into the cut humeral surface, wherein the base extension is a total or partial male complement to the female template punch.

16. A total shoulder arthroplasty apparatus for recreating an anatomic proximal humeral configuration, comprising:

a stemless humeral head for coupling to a cut humeral surface, wherein the humeral head includes a base having a stabilizing base extension protruding therefrom for impaction into a cancellous, non-intramedullary region of the cut humeral surface.

17. The apparatus of Claim 16, wherein the periphery of the humeral head is formed to match cortical margins of the cut humeral surface.

18. The apparatus of Claim 16, wherein the humeral head is attached to the humeral surface using an adhesive.

19. The apparatus of Claim 18, wherein the adhesive is surgical cement.

20. The apparatus of Claim 16, wherein the humeral head is attached to the humeral surface by press-fitting.

21. The apparatus of Claim 16, wherein the periphery of the base of the humeral head is formed to match a specific shape and size of the anatomic neck of a specific humeral surface.

22. The apparatus of Claim 16, further comprising a template punch inserted into the cut humeral surface, wherein the base extension is a total or partial male complement to the female template punch.

23. A total shoulder arthroplasty apparatus for recreating an anatomic proximal humeral configuration, comprising:

a humeral head for coupling to a cut humeral surface, wherein the humeral head includes a base having a stabilizing base extension protruding therefrom for impaction into a cancellous region of the cut humeral surface, and wherein the base extension is confined to protrude only into a ball region of the humerus, to which the humeral head couples, and which is above an elongate region of the humerus.

24. A total shoulder arthroplasty apparatus for recreating an anatomic proximal humeral configuration, comprising:

a humeral head for coupling to a cut humeral surface, wherein the humeral head includes a base having a stabilizing base extension protruding therefrom for impaction into a cancellous region of the cut humeral surface, and wherein the extension is nonintrusive of an elongate humeral region below a humeral ball region including the humeral head.

25. A total shoulder arthroplasty method for recreating an anatomic proximal humeral configuration, comprising the steps of:

preparing a stemless humeral head having a base including a stabilizing base extension for efficient rotational stabilization of the humeral head on a cut humeral surface for coupling with the cut humeral surface;

preparing a humeral surface for coupling the humeral head thereto, including cutting the humeral surface to reveal a cancellous interior; and

coupling the humeral head to the humeral surface, thereby recreating the anatomic proximal humeral configuration.

26. The method of Claim 25, wherein said stabilizing base extension includes one or more fins.

27. The method of Claim 26, wherein said one or more fins are substantially planar in shape.

28. The method of Claim 27, wherein the planar shape of the one or more fins is triangular.

28. The method of Claim 25, wherein the stabilizing base extension includes two fins formed to have a cruciform shape.

30. The method of Claim 25, wherein the protruding base extension further includes at least one linear fin.

31. A total shoulder arthroplasty method for recreating an anatomic proximal humeral configuration, comprising the steps of:

preparing a stemless humeral head having a base including a non stem-bearing stabilizing base extension for rotational stabilization of the humeral head on a cut humeral surface for coupling to the cut humeral surface;

preparing a humeral surface for coupling the humeral head thereto, including cutting the humeral surface to reveal a cancellous interior; and

coupling the humeral head to the humeral surface, thereby recreating the anatomic proximal humeral configuration.

32. The method of Claim 31, wherein the base extension includes two or more linear extensions.

33. The method of any of Claims 25 or 31, wherein the coupling step includes the step of impacting the base extension into the cancellous of the cut humeral surface, wherein the periphery of the humeral head rests on the cortical margins of the humeral surface following the coupling.

34. The method of any of Claims 25 or 31, wherein the coupling step includes the step of adhesively coupling the humeral head to the humeral surface.

35. The method of Claim 34, wherein the adhesive is surgical cement.

36. The method of any of Claims 25 or 31, wherein the coupling step includes the step of press-fitting the humeral head to the humeral surface.

37. The method of any of Claims 25 or 31, wherein the forming step includes the step of selecting a shape and size of the periphery of the base of the humeral head from a variety of shapes and sizes for matching the specific shape and size of the anatomic neck of the cut humeral surface.

38. The method of any of Claims 25 or 31, further comprising the step of inserting a template punch into the cancellous of the cut humeral surface prior to performing the coupling step.

39. The method of Claim 38, wherein the base extension is a total or partial male complement to the female template punch.

40. The method of any of Claims 25 and 31, wherein the coupling step includes impacting the base extension of the humeral head to protrude only into a ball region of the humerus above an elongate region of the humerus.

41. The method of any of Claims 25 and 31, wherein the coupling step includes impacting the base extension of the humeral head nonintrusive to an elongate region of the humerus below a ball region of the humerus.

42. A total shoulder arthroplasty method for recreating an anatomic proximal humeral configuration, comprising the steps of:

preparing a stemless humeral head having a base including a non stem-bearing stabilizing base extension for rotational stabilization of the humeral head on a cut humeral surface for coupling to the cut humeral surface;

preparing a humeral surface for coupling the humeral head thereto, including cutting the humeral surface to reveal a cancellous interior; and

coupling the humeral head to the humeral surface, thereby recreating the anatomic proximal humeral configuration, including impacting the base extension of the humeral head to protrude only into a ball region of the humerus above an elongate region of the humerus.

43. A total shoulder arthroplasty method for recreating an anatomic proximal humeral configuration, comprising the steps of:

preparing a stemless humeral head having a base including a non stem-bearing stabilizing base extension for rotational stabilization of the humeral head on a cut humeral surface for coupling to the cut humeral surface;

preparing a humeral surface for coupling the humeral head thereto, including cutting the humeral surface to reveal a cancellous interior; and

coupling the humeral head to the humeral surface, thereby recreating the anatomic proximal humeral configuration, including impacting the base extension of the humeral head nonintrusive to an elongate region of the humerus below a ball region of the humerus.

44. The method of any of Claims 25, 31 or 42-43 wherein said preparing step comprises the steps of:

surgically establishing an access to a humerus of a patient;

coupling a guide to the humerus, wherein the humeral head remains exposed;

positioning said guide to define a humeral surface; and

removing said humeral head by cutting along said humeral surface defined by said guide, whereby a precise humeral surface is revealed for attaching an artifical humeral head during said arthroplasty.

45. The method of Claim 44, further comprising the step of aligning said humeral surface with a glenoid version guide.

46. The method of Claim 44, further comprising the steps of:

preparing for coupling to the cut humeral surface a stemless humeral head having a base including a non stem-bearing stabilizing base extension for rotational stabilization of the humeral head on a cut humeral surface; and

coupling the humeral head to the humeral surface, thereby recreating the anatomic proximal humeral configuration.

47. A method for performing a shoulder arthroplasty, comprising the steps of:

surgically establishing an access to a humerus of a patient;

coupling a guide to the humerus, wherein the humeral head remains exposed;

positioning said guide to define a humeral surface; and

removing said humeral head by cutting along said humeral surface defined by said guide, whereby a precise humeral surface is revealed for attaching an artifical humeral head during said arthroplasty.

48. The method of Claim 47, further comprising the step of aligning said humeral surface with a glenoid version guide.

49. The method of Claim 47, further comprising the steps of:

preparing for coupling to the cut humeral surface a stemless humeral head having a base including a non stem-bearing stabilizing base extension for rotational stabilization of the humeral head on a cut humeral surface; and

coupling the humeral head to the humeral surface, thereby recreating the anatomic proximal humeral configuration.

50. A total shoulder arthroplasty method for recreating an anatomic proximal humeral configuration, comprising the steps of:

preparing a stemless humeral head having a base including a non stem-bearing stabilizing base extension for rotational stabilization of the humeral head on a cut humeral surface for coupling to the cut humeral surface;

preparing a humeral surface for coupling the humeral head thereto, including cutting the humeral surface to reveal a cancellous interior; and

coupling the humeral head to the humeral surface, thereby recreating the anatomic proximal humeral configuration.